



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,768	11/17/2003	Toru Ishikawa	ELPIDA WN-2632	2426
27667	7590	01/19/2005		
HAYES, SOLOWAY P.C. 130 W. CUSHING STREET TUCSON, AZ 85701			EXAMINER LE, DINH THANH	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/714,768

Applicant(s)

ISHIKAWA, TORU

Examiner

DINH T. LE

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/4/03</u> . | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 2816

DETAILED ACTION***Specification***

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objection

Claim 4 is objected to because of the following informalities: "s ri s" on line 2 of claim 9 should be corrected as --series--. Appropriate correction is required.

Claim Rejections***Claim Rejections - 35 USC § 112***

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction or clarification is required.

In claim 1, the recitation " the even stage delay element" on line 4, " the odd-stage delay element" on line 6 and "said delay elements" on line 8 lacks clear antecedent basis. The recitation "clock signal" on lines 4-5 and "inputs" on line 10 is confusing because it is unclear if these are additional "clock signal" and "inputs" or further recitation of the previously claimed " clock signal " on line 2 and "inputs" on line 9. Also, it is unclear where the even-stage delay element and the odd-stage delay element come from, how an even delayed signal and an odd-delayed signal can be obtained from a clock signal from the even-stage delay element and the

Art Unit: 2816

odd-stage delay element, and how the selectors can be used on lines 7, 10 and 12. The same is true for claim 9.

In claim 4, it is unclear how the "fine adjustment" on line 4 can be applied and how this step is read on the preferred embodiment. Insofar as understood, no such step is seen on the drawings. The same is true for claim 8.

In claim 5, it is not understood what the "first stage and second stage to Nth-stage selectors" are.

In claim 9, for example, the recitation "the given delay elements" on line 4 lacks antecedent basis. It is unclear what the given delay element and "input/output portion" on line 4, "2:1 selectors" and "the type" on line 8, and "for-even-stage selectors" on line 9 are, how the delays of the given delay elements on line 4 can be switchingly selected since no means for performing the switching function is recited in the claim. Also, the recitation "wherein . . . selector" on lines 8-27 is unclear and is difficult to follow and understand. This limitation should be clarified.

The remaining claims are dependent from the above claims and therefore also considered indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, as understood, are rejected under 35 USC 102 (b) as being anticipated by Llewellyn (US 5,374,860).

Art Unit: 2816

As the best construed, Llewellyn discloses in Figure 5 a delay circuit comprising:

- a plurality of stage delay elements (32) connected in series;
- plurality of selectors (34, 36) being used to output an even stage delayed signal (60) and an odd-stage delayed signal (62); and
- wherein the delay elements (32) have equal delay time or can be selected to have different delay time, see lines 1-7, column 5.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 USC 103 (a) as being unpatentable over Figures 1 of the applicant's admitted prior art in view of Llewellyn (US 5,374,860).

The admitted prior art discloses in Figure 1 a delay circuit comprising a delay 10 for generating an even delayed signal and an odd delayed signal which are synthesized by the adjusting circuit (2) but does not disclose that the delay (10) comprising a plurality of selectors. Llewellyn teaches in Figure 5 a delay circuit comprising a plurality of selectors (34, 36) for providing the capability of setting a desired delay by programming means, see lines 40-45, column 2. It would have been obvious to a person having skill in the art at the time the invention was made to employ the selectors taught by Llewellyn in the circuit of the admitted prior art for the purpose of providing the capability of setting a desired delay by programming means.

Art Unit: 2816

Allowable Subject Matter

Claims 5-9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

The claims are allowable because the prior art of record does not show the circuit comprising the combination of the delay elements and the selectors, in particular, the selectors including a plurality of even and odd-stage selectors as recited in claim 9, and the one input of one selector is connected to an output terminal of a next selector but one stage as recited in claim 5.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DINH T. LE whose telephone number is (571) 272-1745. The examiner can normally be reached on Monday-Friday (8AM-7PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY CALLAHAN can be reached at (571) 272-1740.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DINH T. LE
PRIMARY EXAMINER

